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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,934	08/28/2003	Katsuhiko Yoshimoto	KOBE.0055.	6098

38327 7590 03/16/2006

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EXAMINER

KIM, YOON YOUNG

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/649,934	YOSHIMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yoon-Young Kim	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is response to the Amendment filed on December 30, 2006.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11, 14, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Newton (N) is not a unit of pressure. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1-2 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita et al., U.S. Patent No. 5,107,757 in view of Louden et al., 5,543,044.

Regarding Claim 1, Ohshita discloses a dewatering system for dewatering a material, the system comprising: a pressure roller dewatering apparatus comprising: two dewatering rollers (Fig. 20, #108, 109) parallel to each other, and at least one water-absorbent draw-in member provided on the external periphery of the dewatering roller (Col. 17, Lines 43-48); a water content-controlling unit (#105, 107) for dewatering the material and for supplying the resulting water-content-controlled dewatered material between the two dewatering rollers, the water content-controlling unit being disposed upstream of the pressure roller dewatering apparatus; and a roller recycling unit (Fig. 26, #120, 121, 122, 126, 127, 128) for removing adhering matter and water from the draw-in member. However, Ohshita does not disclose adjusting the water content of the material. Louden teaches a dewatering system adjusting the water content of material based upon a relationship between the water content of the dewatered material to be fed to the dewatering rollers and a predetermined thickness of the cake to be formed from the dewatered material (Col. 6, Lines 44-58). It would have been obvious to one of ordinary skill in art to modify Ohshita with the element of Louden in order to facilitate a greater degree of deliquification and presetting of the sludge (Col. 6, Lines 53-58).

Regarding Claim 2, Ohshita discloses a cake removing unit (#128) for removing the cake adhering onto the surface of the draw-in member; a cleaning unit (#120, 121, 122) for cleaning the draw-in unit; and a water removing unit (#126, 127) for removing the water absorbed in the draw-in member.

Regarding Claim 7, Ohshita discloses a drain unit (#126, 127) for collecting water produced by the roller recycling unit and draining the collected water to the outside of the dewatering system.

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Regarding Claim 8, Ohshita discloses that at least one water-absorbent draw-in member provided on the external periphery of the dewatering roller (Col. 17, Lines 43-48). Duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 9, Ohshita discloses a cake removing unit (#128) for removing the cake adhering onto the surface of the draw-in member; a cleaning unit (#120, 121, 122) for cleaning the draw-in unit; and a water removing unit (#126, 127) for removing the water absorbed in the draw-in member. Duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claims 10 and 12, Ohshita discloses that the water content of the material is reduced to about 90% or lower (Col. 27, Lines 10-17).

Regarding Claims 11 and 14-15, Ohshita discloses an applied pressure from 50 to 100 kg/cm<sup>2</sup> (Col. 22, Lines 41-45).

Regarding Claim 13, Ohshita discloses that at least one water-absorbent draw-in member provided on the external periphery of the dewatering roller (Col. 17, Lines 43-48). Duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

5. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita in view of Loudon as applied to Claim 2 above, and further in view of Yamamoto, U.S. Patent No. 4,279,760.

Regarding Claim 3, Ohshita in view of Loudon does not disclose a transfer roller. Yamamoto teaches a dewatering system comprising a transfer roller (Fig. 1, #5) that makes rolling contact with the draw-in member of the dewatering roller. It would have been obvious to

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one of ordinary skill in the art to modify Ohshita in view of Louden with the element of Yamamoto because they are both dewatering systems.

Regarding Claim 4, Yamamoto discloses a scraper (#11) for scraping off the cake provided to the transfer roller. It would have been obvious to one of ordinary skill in the art to modify Ohshita in view of Louden with the element of Yamamoto in order to separate the cake from the roll (Col. 4, Lines 5-7).

Regarding Claim 5, Yamamoto discloses a washing nozzle (#13) for spraying water toward the surface of the draw-in member (#3). It would have been obvious to one of ordinary skill in the art to modify Ohshita in view of Louden with the element of Yamamoto in order to clean the draw-in member (Col. 3, Lines 19-25).

Regarding Claim 6, Yamamoto discloses a squeezer roller (#4) for rolling the draw-in member (#3) of the dewatering roller (#1). It would have been obvious to one of ordinary skill in the art to modify Ohshita in view of Louden with the element of Yamamoto in order to serve as a cake removing means onto which filter cake is transferred (Col. 1, Lines 65-67).

### ***Response to Arguments***

6. Applicant's arguments with respect to Claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Ohshita in view of Louden and Yamamoto teaches the invention as claimed.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK  
03/09/06

  
JOHN KIM  
Primary PATENT EXAMINER